

CLAIMS:

1. A method of encoding a multi-channel audio signal including at least a first signal component, a second signal component and a third signal component, the method comprising:

5 encoding the first and second signal components by a first parametric encoder resulting in a first encoded signal and a first set of encoding parameters;
encoding the first encoded signal and a further signal by a second parametric encoder, resulting in a second encoded signal and a second set of encoding parameters, where the further signal is derived from at least the third signal component; and
10 representing the multi-channel audio signal at least by a resulting encoded signal derived from at least the second encoded signal, by the first set of encoding parameters and by the second set of encoding parameters.

2. A method according to claim 1, wherein the multi-channel audio signal further comprises a fourth signal component; the method further comprises encoding the third and
15 fourth signal components by a third parametric encoder resulting in the further signal and a third set of encoding parameters; and the step of representing the multi-channel audio signal comprises the step of representing the multi-channel audio signal at least by the resulting encoded signal derived from at least the second encoded signal, by the first set of encoding parameters, by the second set of encoding parameters, and by the third set of encoding
20 parameters.

3. A method according to claim 2, wherein the multi-channel signal comprises a four-channel audio signal, the first signal component includes a left-front channel of the four-channel audio signal, the second signal component includes a left-rear channel of the four-channel audio signal, the third signal component includes a right-front channel of the four-channel audio signal, and the fourth signal component includes a right-rear channel of the
25 four-channel audio signal.

4. A method according to claim 2, wherein the multi-channel signal comprises a five-channel audio signal, the first signal component includes a left-front channel of the five-channel audio signal, the second signal component includes a left-rear channel of the five-channel audio signal, the third signal component includes a right-front channel of the five-channel audio signal, the fourth signal component includes a right-rear channel of the five-channel audio signal; the five-channel audio signal further includes a center signal; the method further comprises encoding the second encoded signal and the center signal by a fourth parametric encoder resulting in a third encoded signal and a fourth set of encoding parameters; and the step of representing the multi-channel audio signal comprises
10 representing the multi-channel audio signal at least by the third encoded signal, and by the first, second, third and fourth sets of encoding parameters.

5. A method according to claim 2, wherein the multi-channel signal comprises a five-channel audio signal, the first signal component includes a left-front channel of the five-channel audio signal, the second signal component includes a left-rear channel of the five-channel audio signal, the third signal component includes a right-front channel of the five-channel audio signal; the fourth signal component includes a right-rear channel of the five-channel audio signal; the five-channel audio signal further includes a center signal; and the step of encoding the first encoded signal and a further signal further comprises combining
15 each of the first encoded signal and the further signal with the center signal.

6. A method according to claim 2, wherein the multi-channel signal comprises a five-channel audio signal, the first signal component includes a left-front channel of the five-channel audio signal, the second signal component includes a left-rear channel of the five-channel audio signal, the third signal component includes a right-front channel of the five-channel audio signal, the fourth signal component includes a right-rear channel of the five-channel audio signal; the five-channel audio signal further includes a center signal; and the step of representing the multi-channel audio signal comprises the step of representing the multi-channel audio signal at least by the second encoded signal, the center signal, and by the
25 first, second, and third sets of encoding parameters.

7. A method of decoding an encoded multi-channel audio signal, the method comprising:

obtaining a first encoded signal, a first set of encoding parameters, and a second set of encoding parameters from the encoded multi-channel audio signal;

obtaining first and second decoded signals from the first encoded signal and the first set of encoding parameters, the second decoded signal representing at least a first
5 signal component of the multi-channel signal; and

obtaining third and fourth decoded signals from the first decoded signal and the second set of encoding parameters.

8. An arrangement for encoding a multi-channel audio signal including at least a
10 first signal component, a second signal component and a third signal component, the arrangement comprising:

a first parametric encoder adapted to encode the first and second signal components resulting in a first encoded signal and a first set of encoding parameters;

a second parametric encoder adapted to encode the first encoded signal and a
15 further signal, resulting in a second encoded signal and a second set of encoding parameters, where the further signal is derived from at least the third signal component.

9. An arrangement according to claim 8, further comprising means for representing the multi-channel audio signal at least by a resulting encoded signal derived
20 from at least the second encoded signal, by the first set of encoding parameters and by the second set of encoding parameters.

10. An arrangement for decoding an encoded multi-channel audio signal, the arrangement comprising:

25 means for obtaining a first encoded signal, a first set of encoding parameters, and a second set of encoding parameters from the encoded multi-channel audio signal;

a first decoder adapted to obtain first and second decoded signals from the first encoded signal and the first set of encoding parameters, the second decoded signal representing at least a first signal component of the multi-channel signal; and

30 a second decoder adapted to obtain third and fourth decoded signals from the first decoded signal and the second set of encoding parameters.

11. An apparatus for supplying an encoded audio signal, the apparatus comprising a unit for receiving a multi-channel audio signal;

an arrangement for encoding as claimed in claim 8 for encoding the multi-channel audio signal; and

an output unit for providing the encoded audio signal.

- 5 12. An apparatus for supplying a decoded audio signal, the apparatus comprising an input unit for receiving an encoded audio signal; an arrangement for decoding as claimed in claim 10 for decoding the encoded audio signal; and an output unit for providing the decoded audio signal.

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13. An encoded multi-channel audio signal including an audio signal and first and second sets of parameters, where the audio signal and the first set of parameters are generated by a first parametric encoder upon input of a first encoded signal and a further signal, where the first encoded signal and the second set of parameters are generated by a second
15 parametric encoder upon input of a first and second signal component of a multi-channel signal, and where the further signal is derived from at least a third signal component of the multi-channel signal.

14. A storage medium having stored thereon an encoded audio signal according to
20 claim 13.